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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,032	06/07/2001	Alan H. Gnauck	3493.00174 (IDS 2000-0561	6060
28317	7590	08/10/2005	EXAMINER PHAN, HANH	
BANNER & WITCOFF LTD., ATTORNEYS FOR AT & T CORP 1001 G STREET, N.W. ELEVENTH STREET WASHINGTON, DC 20001-4597			ART UNIT 2638	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/875,032

Applicant(s)

GNAUCK ET AL.

Examiner

Hanh Phan

Art Unit

2638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 June 2001.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-31 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This Office Action is responsive to the RCE filed on 06/02/2005.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gfeller et al (US Patent No. 6,850,709) in view of Kartalopoulos (US Patent No. 6,580,538).

Regarding claims 1, 2, 4-8, 10-16, 18-22 and 24-31, referring to figure 1A, Gfeller teaches a method for increasing transmission distance of an optical communications link using tendons comprising the steps:

encoding a data signal to be transmitted using an encoding scheme that reduces a number of ones disproportionally relative to a number of zeros in the data signal (col. 6, lines 13-37); and

transmitting the encoded data signal over the optical communications link using the tendons (col. 6, lines 13-37).

Gfeller differs from claims 1, 2, 4-8, 10-16, 18-22 and 24-31 in that he fails to specifically teach transmitting the encoded data signal over an optical fiber link.

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However, Kartalopoulos teaches transmitting the encoded data signal over an optical fiber link (Fig. 5, col. 8, lines 31-67 and col. 9, lines 1-65). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the transmitting the encoded data signal over an optical fiber link as taught by Kartalopoulos in the system of Gfeller. One of ordinary skill in the art would have been motivated to do this since Kartalopoulos suggests in column 8, lines 31-67 and col. 9, lines 1-65 that using such the transmitting the encoded data signal over an optical fiber link have advantage of allowing providing an optical communication with high speed and high capacity.

Regarding claims 3, 9, 17 and 23, the combination of Gfeller and Kartalopoulos teaches a method for increasing transmission distance of a fiber optical communications link using tedons comprising the steps:

receiving an encoded data signal wherein the encoded data signal was encoded by a transmitter using an encoding scheme that reduced a number of ones disproportionately relative to a number of zeros in a data signal; and

decoding the encoded data signal (col. 6, lines 13-37 of Gfeller and see col. 9 of Kartalopoulos, lines 62-65).

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571)272-3078. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

  
**HANH PHAN**  
**PRIMARY EXAMINER**